THE COMMONWEALTH OF MASSACHUSSETTS

BEFORE THE

DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

WESTERN MASSACHUSETTS ELECTRIC COMPANY

D. T. E. 00-11

TESTIMONY OF

RI CHARD A. SODERMAN

ON BEHALF OF

WESTERN MASSACHUSETTS ELECTRIC COMPANY

**JANUARY 6, 2000** 

- Q. Please state your name and business address.
- A. My name is Richard A. Soderman. My business address is 107 Selden Street, Berlin, Connecticut 06037.
- Q. Please state your position with the Western Massachusetts Electric Company (  $\mbox{WMECO}$  or the  $\mbox{Company}$  ).
- A. I am Director of Regulatory Policy and Planning for Northeast Utilities Service Company, which provides centralized services to the operating companies of the Northeast Utilities (NU) system, including WMECO.
- Q. In your position, what are your responsibilities?
- A. I am responsible for developing and implementing regulatory policies and practices for the NU system companies. As part of these responsibilities, I have directed the preparation and filing of various plans and proposals related to electric industry restructuring, including those necessary to implement the Massachusetts Electric Industry Restructuring Act (the Act ).

- Q. Please provide an overview of the purpose of your testimony.
- A. My testimony is submitted to account for the recently announced sale of the Vermont Yankee nuclear power plant (the Plant ). I will discuss the essential elements of the sale, the economics of the sale and the adjustments to be made to stranded costs.
- Q: Have you submitted prior testimony before the Department of Telecommunications and Energy (the Department)?
- A. Yes, I have submitted testimony in numerous dockets involving WMECO including D.T.E. 97-120, WMECO s Restructuring Plan.
- Q: Please describe the current operations and structure of Vermont Yankee Nuclear Power Corporation ( VYNPC )?
- A: VYNPC owns and operates a single nuclear powered electric generating station of approximately 510 megawatts net electrical power located in Vernon, Vermont. The Plant commenced operation in 1972 and is licensed by the Nuclear Regulatory Commission (NRC) to operate until March 2012. The common equity of the company is owned by 13 utilities. Nine of those utilities, including WMECO, have long-term power contracts with VYNPC and are known as the Sponsors. In connection with the organization of VYNPC, each of the Sponsors entered into a Power Contract as of February 1, 1968 (as subsequently amended, the Power Contract). Pursuant to each Power Contract, the Sponsor must take a certain percentage of the output of the Plant and must pay the same percentage of the operating and maintenance expenses and capital costs of the Plant, including the cost eventually to decommission the Plant at the termination of its NRC license. WMECO owns 2.5% of the common stock of VYNPC and, pursuant to the Power Contract is entitled to 2.5% of its output through March 2012.
- Q: Please describe the terms of the sale of the Plant to AmerGen Energy Company, LLC (AmerGen).
- A: Pursuant to an Asset Purchase Agreement dated November 17, 1999 (the APA), VYNPC will transfer the Plant to AmerGen. After the closing, AmerGen will assume all obligations relating to the operation and maintenance of the Plant and will become the NRC licensee for the Plant. In addition, AmerGen will assume all responsibility for safely decommissioning the Plant. In connection with the sale, VYNPC and AmerGen will enter into a Power Purchase Agreement (PPA) pursuant to which AmerGen will sell the output of the Plant to VYNPC at a yearly fixed price for the remaining 12-year life of the Plant. In connection with the sale, the Sponsors and VYNPC are obligated to amend their Power Contracts to accommodate the power sold to VYNPC under the PPA. The Sponsors had two options. Under the first option, the Power Contract would be amended so that the Sponsor would purchase its entitlement share of the power sold to VYNPC under the PPA and would continue to have certain ongoing obligations to VYNPC, which I will describe below. Alternatively, the Power Contract would be amended so that only the continuing obligations would be due, but there would be no obligation to purchase the entitlement share of the PPA power. To select the second option, however, the Sponsor would be required to make a buyout payment to avoid this PPA obligation. WMECO, together with certain of the other Sponsors, elected this PPA buyout option.
- Q: What is the sale price for the plant?
- A: The sale price is time dependent. If the sale closes on December 1, 2000, the price is 10 million. The price increases 90,000 per day for every day prior to December 1, 2000. Assuming a closing on July 1, 2000, the sale price will be 23.5 million, subject to minor adjustments at closing.
- Q: What is the benefit to WMECO of selling the plant?
- A: By selling the Plant, WMECO obtains a number of benefits. First, the terms of the Page 2

- sale will result in a significant reduction in the decommissioning costs which must be paid by WMECO and the other Sponsors. Additionally, WMECO will no longer be exposed to the risk of plant operations. Finally, the sale permits WMECO to conform its operations to the mandates of the Act and the orders of this Department by divesting itself of generation-related assets.
- Q: Is WMECO requesting the Department's approval of the sale to AmerGen?
- A: No. This transaction is subject to the exclusive jurisdiction of the Federal Energy Regulatory Commission (FERC), which must review and approve it. The Department's role is in adjusting the WMECO stranded costs associated with its VYNPC obligations. WMECO plans to include the stranded costs associated with its FERC-approved VYNPV obligations in a future transition cost reconciliation filing.
- Q: Please describe the status of the decommissioning trust fund.
- A: Since 1984, VYNPC, like all other owners of nuclear plants, has been making annual contributions to a decommissioning trust fund to ensure that by the time the Plant s license terminates, VYNPC will have sufficient funds to safely decommission the Plant and restore the site. This fund is also necessary to provide the decommissioning funding assurance required by the NRC.
- Q: What will be done with the decommissioning trust fund in the context of the sale to AmerGen?
- A: After closing, AmerGen will have complete responsibility for decommissioning the Plant. In return for assuming this obligation, VYNPC will transfer the decommissioning trust to AmerGen in an amount that is specified in the APA. Assuming a closing on July 1, 2000, the decommissioning trust must be funded to a level of \$289 million.
- $\mbox{\ensuremath{\mbox{Q:}}}$  Will this level of decommissioning funds require any additional contribution by the VYNPC Sponsors?
- A: Yes. The decommissioning fund is a sinking fund. Accordingly, the annual contributions have been calculated such that the decommissioning liabilities will be fully funded as of the date of license termination. Since that termination is not scheduled to occur until March 2012, the decommissioning fund is not yet fully funded. As of July 1, 2000, the decommissioning fund is projected to have approximately \$259 million in it. To top off the fund incident to its transfer to AmerGen, the Sponsors will therefore need to contribute \$30 million.
- Q: Are there any additional amounts to be included in the top-off?
- A. Yes. The Sponsors will also need to contribute \$24 million to be paid to the Texas Low Level Waste Compact, which will receive the Low Level Radioactive Waste (LLRW) from the Plant. This is an obligation that would exist even if the sale did not occur and VYNPC continued to own and operate the Plant. Including this contribution, the total top-off amount is \$54 million. Based on its 2.5% ownership, WMECO is liable for approximately \$1.35 million as its share of the top-off payment.
- Q: How will the top-off be paid to AmerGen and recovered from the Sponsors?
- A: VYNPC will borrow the funds to make a cash payment to AmerGen at the closing. Under the amended Power Contracts, the top-off amount will then be recovered from the Sponsors over the remaining life of the Plant.
- Q: What are the benefits to WMECO and its ratepayers from making this top-off?
- A: Under the current Power Contract with VYNPC, WMECO and its ratepayers are required to pay the full costs of decommissioning the Plant. VYNPC's latest site specific decommissioning cost estimate is \$527 million in Year 2000 dollars. However, AmerGen has negotiated for a decommissioning fund of only \$289 million. The Page 3

transfer of the decommissioning liability therefore results in an immediate benefit to VYNPC s Sponsors, and their ratepayers, of \$238 million. Based on a 2.5% entitlement percentage WMECO s share of this benefit is approximately \$ 5.9 million.

In addition to this immediate benefit, by transferring the decommissioning liability with the topped off decommissioning fund, VYNPC and, by extension, WMECO, avoid the risk that the decommissioning costs will escalate in the future as a consequence, for example, of changes in decommissioning regulations, loss of LLRW storage options, or higher decommissioning-specific inflation. The top-off and transfer to AmerGen also avoids the risk of substandard investment performance for the decommissioning fund. Absent the APA, VYNPC s Sponsors would be required under the Power Contracts to make up any shortfall in the decommissioning fund caused by unexpectedly increased costs or decreased earnings. As a consequence of the sale, however, AmerGen assumes these risks.

O: Please explain the Power Purchase Agreement buyout option?

A: As I have testified, under the terms of the sale to AmerGen, VYNPC is obligated to purchase the power from the Plant after the sale until the end of life of the plant in March 2012. The price at which the power is sold is fixed for each year during that period and is generally at a higher price than estimated market prices, particularly in the early years. The APA requires the Sponsors and VYNPC to amend their Power Contracts, so that the Sponsors are obligated to purchase from VYNPC their entitlement percentages of the power sold by AmerGen under the PPA.

Pursuant to the APA, however, a limited percentage of the individual VYNPC Sponsors were given the opportunity to buy out their PPA obligations under these amended Power Contracts by making a payment to AmerGen at the closing. WMECO, together with a number of the other sponsors, elected to buy out their respective PPA obligations.

It is important to reiterate that under the current Power Contract, prior to the sale to AmerGen, WMECO is required to take its entitlement percentage of the Plant s output and pay the entitlement percentage of the all the costs of the Plant that generates that power. The amendments and the PPA buyout option reduce this obligation by AmerGen assuming ownership of the Plant and selling the output to VYNPC, rather than having VYNPC generate the output itself. Accordingly this PPA obligation is a long-term power contract approved by FERC that can be bought out and reduced to a fixed present value, and recovered as securitizable stranded costs in accordance with G.L. c. 164, 1H.

Q: How does the cost of the buyout compare to the cost of accepting the PPA obligations under the amended Power Contract?

A: As I indicated earlier, the PPA is an overmarket agreement. That is, the prices to be paid for electricity under the PPA generally exceed the anticipated market prices for electricity. Thus, the contract has a negative value to WMECO. We have conducted analyses using estimated market prices for base load nuclear power and found that the net present value to WMECO of the PPA is negative \$[REDACTED] million.

The price to buy out the PPA obligations, like other facets of the agreement between VYNPC and AmerGen, varies over time. For a closing on July 1, 2000, the price would be \$[REDACTED]/kW, dropping to \$[REDACTED]/kW for a closing in December 2000. Using WMECO s 2.5 % entitlement percentage and the 510 MW Plant capacity, this translates to \$[REDACTED] million for a closing on July 1, 2000 and \$[REDACTED] million for a closing in December 2000. Thus, buying out the PPA obligation as of July 1, 2000 requires the payment of \$[REDACTED] million to avoid the estimated negative obligations of \$[REDACTED] million net present value. We believe that the avoidance of market risk, described below, as well as the lack of viable alternatives and other factors, justifies the additional amount to buy out the PPA obligation.

Q: What is the alternative to buying out the PPA?

- A: If WMECO did not buy out the PPA obligation it would be forced to take the power produced by the Plant under its Power Contract for the next 12 years. However, as a consequence of the Act, WMECO no longer has any retail load. Under the mandates of the Act, as well as this Department's orders implementing it, WMECO has become a transmission and distribution company. Thus the Company, as required by the Act, auctioned off its non-nuclear generation assets and has filed its proposal to auction off its nuclear assets. It would be contrary to the letter and the spirit of the Act for WMECO to continue to retain this generation-related asset or to accept the new PPA obligations related to the Plant. This transaction provides WMECO with the unique opportunity to avoid entering into a new PPA obligation as well as terminating the existing power purchase obligation for the Plant, in furtherance of the Act s objectives. In the absence of the buyout, under the Act WMECO would need either to pay a third party to accept the future PPA obligations or else sell the power on the spot market as it is generated.
- Q: Can you comment on the possibility of paying a third party to accept the PPA obligations?
- A: Yes. As I have earlier testified, the fact that the prices under the PPA are higher than anticipated market prices means that WMECO would need to pay a third party to assume the PPA. It is unlikely that WMECO would be able to locate any party that would assume the PPA obligation for less than the \$[REDACTED] million payment that would be necessary simply to buy out the PPA.
- Q: Are there drawbacks to WMECO simply accepting the PPA and selling the power on the spot market?
- A. Yes. While it may appear to have a more favorable net present value than the buyout, this course of action exposes WMECO and its ratepayers to the market risk associated with the electricity spot market. If the market price of electricity proves to be lower than currently anticipated, the overmarket negative value of the PPA will be even greater than the \$[REDACTED] million calculated above. In fact, our studies show that a market price of electricity only 4% lower than the yearly figures predicted would entirely eliminate the differential between the overmarket cost avoided and the buyout cost. In addition, if the Plant were to perform at higher capacity factors than anticipated, WMECO would be forced to purchase even greater amounts of overpriced power and would suffer a correspondingly greater loss from continued performance under the amended Power Contract.
- Q: Have other VYNPC Sponsors made similar decisions to buy out the PPA?
- A: Yes. Other Sponsors, notably Montaup Electric Company and New England Power Company, that have been transformed by deregulation in Massachusetts into transmission companies that do not service any load, elected to buy out their PPA obligations. By contrast Central Vermont Public Service Corp. and Green Mountain Power Corp., which continue to have native load to serve, elected to accept the PPA obligation.
- Q: How are the costs of the PPA buyout recovered?
- A: The costs of the PPA buyout are costs under a long-term power contract approved by the FERC that will be reduced to a fixed present value. Accordingly, pursuant to G. L. c. 164, 1G, the PPA buyout costs are recoverable as stranded costs as a component of the transition charge.
- Q: Will the PPA buyout be securitizable?
- A: Yes, G.L. c. 164, 1H allows long-term FERC approved power contract costs converted to a fixed net present value to be securitized. WMECO will consider including these costs in its upcoming application for financing orders.
- Q: Are there other costs associated with the Power Contract to be recovered as Page 5

stranded costs through the transition charge?

- A: Yes, aside from the PPA buyout, the amended Power Contract will require, as it does now, that WMECO continue to pay its entitlement percentage of the ongoing operational costs of VYNPC, but not the Plant. VYNPC will still exist after the sale and will have a small administrative staff. In addition, as I testified earlier, the decommissioning top-off will be financed over the remaining life of the Plant. Also among the continuing costs will be the requirement under the APA to indemnify AmerGen for the costs of storing spent nuclear fuel (capped at \$14.5 million for all of VYNPC), costs associated with the transfer of certain transmission facilities to Vermont Electric Power Company, and, most notably, return of and on remaining unamortized investment in the Plant (net of AmerGen s payment for the Plant). If the sale to AmerGen closes on July 1, 2000, for example, the net book value of the plant will be \$149.5 million, minus the estimated \$23.5 million to be paid by AmerGen, leaving approximately \$126.0 million of unrecovered investment that will continue to be collected through FERC rates with a return. These are unrecovered contract obligations to be recovered as stranded costs through WMECO s transition charge.
- Q: Has WMECO recalculated the stranded costs associated with VYNPC in light of the sale to AmerGen?
- A: Yes. Schedule RAS-1 provides a summary of the projected stranded cost revenue requirements. The total stranded costs associated with Vermont Yankee are \$16.8 million on a nominal basis and \$13.7 million on a net present value basis.
- Q: Does this conclude your testimony?
- A. Yes it does.